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(54) Storing data objects in a smart card memory

(57)The invention refers to a method for storing data objects 210, 220, 230, 240 in the memory 200 of a smart card 100. To do this, general and application-specific data objects are defined using freely selectable security characteristics and access rights, which are filed in the memory of a smart card which is divided into several application-specific memory areas 110, 120 so that data objects with identical access conditions are located in one and the same memory area, irrespective of the application program 310, 320, 330 or smart card user 400 to which these data objects are allocated. All application programs and the smart card user can access the data objects irrespective of the corresponding access conditions. In this way, the re-issuing of smart cards in the case of later expansion of the file structure of the smart card for an application or the addition of extra applications is not necessary. The smart card user can allow any applications to store data on his smart card.

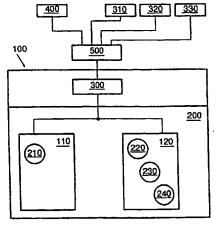


FIG. 2



EUROPEAN SEARCH REPORT

Application Number

EP 99 11 3202

Category	Citation of document with of relevant pas	Indication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CI.7)	
X Y A	WO 98 09257 A (GEM) 5 March 1998 (1998- * page 2, line 20 - * page 9, line 22 - figures 1-9 *	PLUS S.C.A.) -03-05) - page 8, line 18 *		G07F7/10 G06K19/073	
Y,P A,P		A INTERNATIONAL SERVICE ober 1998 (1998-10-01) page 5, line 28 * page 22, line 12;	2		
Y A	11 June 1998 (1998- * page 2, line 36 - * page 6, line 30 -	ATEGIC ANALYSIS, INC.) -06-11) - page 5, line 29 * - page 19, line 33 * - page 30, line 14;	3,4,10		
X A	WO 96 19771 A (EURO 27 June 1996 (1996- * page 3, line 25 - * page 5, line 13 - figures 1-4 *	-06-27) - page 5, line 10 *	1,11 2-10	TECHNICAL FIELDS SEARCHED (Int.CI.7) G07F G06K	
X A	US 5 473 690 A (GRI 5 December 1995 (19 * column 3, line 46 * column 5, line 23 figures 1-9 *		1,11 2-10		
A	P 0 275 510 A (INTERNATIONAL BUSINESS ACHINES CORPORATION) 7 July 1988 (1988-07-27) column 2, line 46 - column 3, line 52 * column 4, line 39 - column 10, line 6; igures 1,2 *		1,10,11		
	The present search report has	been drawn up for all claims Date of completion of the search		Examiner	
	THE HAGUE	16 February 200	I Riv	ero, C	
X : parti Y : parti docu A : tech	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anoument of the same category notogical background—witten disclosure	T: theory or princi E: earlier patent of after the filing of ther D: document cities L: document cities	ple underlying the is ocument, but publicate in the application for other reasons	rivention shed on, or	



EUROPEAN SEARCH REPORT

Application Number EP 99 11 3202

Category	Citation of document with indica of relevant passages		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.CL7)	
A	GB 2 314 948 A (INTERN MACHINES CORPORATION) 14 January 1998 (1998- * page 2, line 36 - pa * page 5, line 31 - pa figures 1-3 *	01-14) ge 4, line 34 *	1,10,11		
				TECHNICAL FIELDS SEARCHED (InLCLT)	
	The present search report has been	drawn up for all claims			
	Place of search THE HAGUE	Date of completion of the search 16 February 2001	Rive	Exercises Rivero, C	
CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure		T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons 8: member of the same patent family, corresponding		rvention hed on, or	

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 99 11 3202

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

16-02-2001

Patent document cited in search report			Publication date	Patent family member(s)		Publication date
WO	9809257	A	05-03-1998	US	5923884 /	13-07-19
				AU	4842897	19-03-19
				CA	2233217	05-03-19
				EP	0858644	
WO	9843212	Α	01-10-1998	AU	6578698	20-10-19
				EP	1004992	31-05-20
				EP	1021801 A	4 26-07-20
				US	6005942 /	21-12-199
WO	9825239	A	11-06-1998	AU	5595398 /	
				EP	0943136 /	22-09-19
WO	9619771	Α	27-06-1996	US	5636357 A	
				AU	4644196	10-07-199
US	5473690	A	05-12-1995	FR	2673476 A	
				DE	69205425 C	
				DE	69205425 1	
				EP	0589884 <i>A</i>	
				ES	2082451 T	
				WO	9213322 A	\ 06-08-199
				JP	6504862 1	02-06-199
EP	275510	A	27-07-1988	CN	87108157 A	
				DE	3782328 A	26-11-199
				DE	3782328 T	
				JP	63182795 A	
				KR	9107037 B	16-09-199
GB	2314948	A	14-01-1998	DE	19626339 A	
				HU	9701130 A	
				JP	10171716 A	
				PL	320722 A	\
				US	6145080 A	07-11-200

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